ACCU-CHEK®
Aviva Nano

BLOOD GLUCOSE METER / GLYCOMÈTRE

User's Manual
Manuel de l'utilisateur

Roche

EN

Whether the Accu-Chek® Aviva Nano Meter is your first blood glucose meter or you have used a meter for some time, please take the time to read this manual carefully before you use your new meter. To use it correctly and dependably, you need to understand its operation, screen displays and all individual features.

Should you have any questions, please contact Accu-Chek Customer Care at 1-800-363-7949 or visit us at www.accu-chek.ca.

The Accu-Chek® Aviva Nano System

Your new Accu-Chek Aviva Nano Meter is for quantitative blood glucose testing using Accu-Chek Aviva Test Strips.

Suitable for self-testing.

The Accu-Chek Aviva Nano Meter may be used by patients who test their own blood glucose as well as by healthcare professionals for monitoring patients' blood glucose values.

The system includes (some items may be sold separately):

- **Accu-Chek Aviva Nano Meter with batteries**
- **Accu-Chek Aviva Test Strips and code chip**
- **Accu-Chek Aviva Control Solution**

Any object coming into contact with human blood is a potential source of infection (see: Clinical and Laboratory Standards Institute: Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline – Third Edition; CLSI document M29-A3, 2005).

Why Regular Blood Glucose Testing Is Important

Testing your blood glucose regularly can make a big difference in how you manage your diabetes every day. We have made it as simple as possible.

Need Help?

Call Accu-Chek Customer Care at 1-800-363-7949.

Important Information About Your New Meter

- Your new meter is designed for testing fresh whole blood samples (for example, blood from your fingertip or forearm). The meter is for outside the body (in vitro) use. It should not be used to diagnose diabetes.
- Only use Accu-Chek Aviva Test Strips. Other test strips will give inaccurate results.
- The meter comes with a preset time and date. You may need to change the time to your time zone.
- If you follow the steps in the manual, but still have symptoms that do not seem to match your test results, or if you have questions, talk to your healthcare professional.

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Chapter 1: Understanding Your New System

The Accu-Chek Aviva Nano Meter

Right and Left Arrow Buttons – Press to enter memory, adjust settings, and scroll through results.

Display – Shows blood glucose results, messages, and results stored in memory.

Test Strip Slot – Insert test strip here.

Front View

Infrared (IR) Window – Used to transfer data from the meter to a computer or PDA.

On/Off/Set Button – Turns the meter on or off and sets options.

Battery Drawer – Pull out the battery drawer to replace batteries, when needed.

Code Chip Slot – Insert code chip into this opening.

Back View

Golden End –
Insert this end of the test strip into the meter.

Yellow Window –
Touch blood drop or control solution here.

Test Strip

Test Strip Container

Control Solution Bottle

On/Off/Set Button

Side View

Infrared (IR) Window

Left Arrow Button

Top View

Right Arrow Button

Code Chip
(for example)

Batteries – Insert into drawer with **(+) side facing down.**

Coding the Meter

1. Make sure the meter is off.

2. Turn the meter over.

3. Remove the old code chip (if there is one in the meter) and discard it.

Change the code chip every time you open a new box of test strips!

4. Turn the code chip over so the code number faces away from you. Push it into the code chip slot until it stops.

5. Leave the code chip in the meter until you open a new box of test strips.

Notes:

- Do not force the code chip into the meter. It is designed to go into the meter only one way.
- If you see a code “- - -” on the display, insert a code chip into the meter.

Using the Accu-Chek Aviva Nano System

- Only use Accu-Chek Aviva Test Strips.
- Change the code chip every time you open a new box of test strips.
- Store the unused test strips in their original container.
- Close the container tightly immediately after you take a test strip out. This helps keep the test strips dry.
- Use the test strip immediately after you take it out of the container.
- Be sure to check the expiry date on the test strip container. Do not use the test strips after that date.
- Store the test strip container and meter in a cool dry place, such as a bedroom.
- Store the test strips at 2 °C to 32 °C. Do not freeze. Use test strips at temperatures within the range indicated in the test strip package insert.
- Do not apply blood or control solution to the test strip before you insert it into the meter.

Do not store test strips in high heat and moisture areas (bathroom or kitchen)! Heat and moisture can damage test strips.

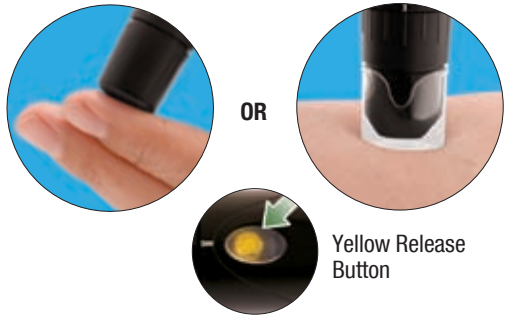
Chapter 2: Testing Your Blood Glucose

Performing a Blood Glucose Test

Before you perform your first blood glucose test, set up the meter correctly. You need the meter, a test strip, and a lancing device with a lancet loaded.

1. Wash and dry your hands.
2. Prepare your lancing device.
3. Insert the test strip into the meter in the direction of the arrows. The meter turns on.

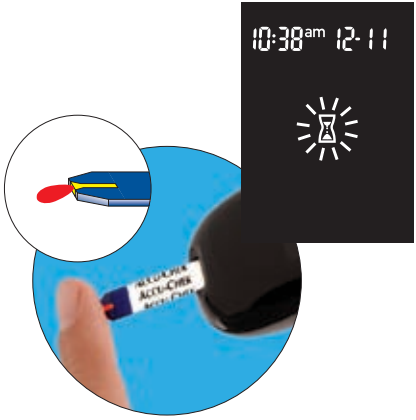
4. Make sure the code number on the display matches the code number on the test strip container. If you miss seeing the code number, remove the test strip and reinsert it into the meter.



5. A test strip and flashing blood drop symbol appear on the display.

6. Lance your fingertip with the lancing device. Blood samples taken from the palm are equivalent to blood taken from the fingertip. For detailed information on how to obtain blood from the palm, refer to the Alternate Site Testing (AST) section, steps 5 and 6.

7. Gently squeeze your finger to assist the flow of blood. This helps you get a blood drop.



8. Touch the blood drop to the **front edge** of the yellow window of the test strip. Do not put blood on top of the test strip. When you see ⌛ flash, you have enough blood in the test strip.

9. The result appears on the display. If you want to mark the test result as a pre-meal or post-meal test, or with a general marker, leave the test strip in the meter (see the next section). Otherwise, remove and discard the used test strip.

Note: After a successful test, the meter turns off five seconds after the test strip is removed.

Marking Test Results and Setting the Post-Meal Reminder

If you wish, you can mark your test result with:

- Pre-Meal Marker
- Pre-Meal Marker with Post-Meal Reminder
- Post-Meal Marker
- General Marker

- Marking results with a **pre-meal** or **post-meal marker** provides more information about your blood glucose results to help you and your healthcare professional in the management of your diabetes.
- When a pre-meal result is marked with a **post-meal reminder** the meter beeps one or two hours after you test to remind you to do a post-meal test.
- You might want to use the **general marker** to mark an event such as an AST (alternate site testing) result or exercise.

When you review the results in memory, these markers can help you remember what was different about the result.

Here is how to mark a test result and initiate a post-meal reminder:

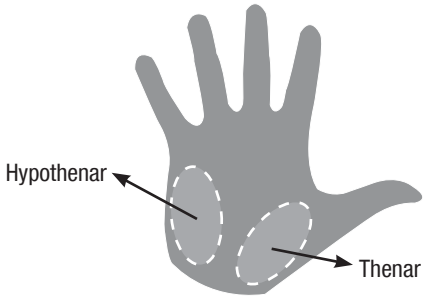
Perform a blood glucose test. **Do not remove the test strip.**

1. Press and release ▷ to toggle through the test result markers and post-meal reminder.
   - Pre-Meal Marker
   - Pre-Meal Marker with Post-Meal Reminder
   - Post-Meal Marker
   - ✱ General Marker
2. When the test result marker (, , or ✱) or pre-meal marker with post-meal reminder ( ) that you wish to select appears on the display, remove the test strip from the meter.
   - If you select the post-meal reminder, the meter beeps one or two hours after the pre-meal test to remind you to do a post-meal test.
   - If you select a test result marker, it is automatically stored in memory.

Note: The post-meal marker automatically appears with the test result if a test is performed 15 minutes before or after the post-meal reminder is programmed to beep. Set the post-meal reminder time to one or two hours in the set-up mode

Alternate Site Testing (AST)

You have the option of testing other places on your body besides the fingertip. Blood obtained from a fingertip or palm can be used at any time to measure blood glucose. The two palm testing sites are the fleshy areas under the thumb (thenar) and under the little finger (hypothenar). If blood from an alternate site such as the forearm, upper arm, thigh, or calf is used, there are certain times when testing is not appropriate (see next page). This is because your glucose level changes quicker in your fingertip or palm than in the alternate sites. These differences may cause you to make the wrong therapeutic decision producing adverse health effects. Please read the following section before you try testing from other places.



IMPORTANT

- Talk to your healthcare professional about Alternate Site Testing.

Do not change your treatment because of just one result.

NEVER ignore symptoms of high or low blood glucose.

If your blood glucose result does not match how you feel, perform a fingertip/palm test to confirm your result. If the fingertip/palm result still does not match how you feel, talk to your healthcare professional.

Alternate site testing may be done:

- Immediately before a meal
- Fasting

DO NOT test from an alternate site:

- Two hours or less after eating
- After exercising
- If you are sick
- If you think your blood glucose is low
- If you often don't notice when your blood glucose is low
- During peak action time of short-acting insulin or rapid-acting insulin analogues
- Up to two hours after injecting a short-acting insulin or rapid-acting insulin analogue

To perform a blood glucose test from an alternate site, you need the meter, a test strip, and a lancing device with the clear AST cap.

1. Prepare the lancing device.

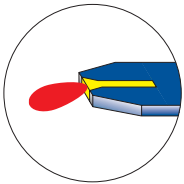
2. Insert the test strip into the meter in the direction of the arrows. The meter turns on.

3. Make sure the code number on the display matches the code number on the test strip container. If you miss seeing the code number, remove the test strip and reinsert it into the meter.

4. A test strip and flashing blood drop symbol appear on the display.

5. Press the lancing device firmly against a fleshy area on the alternate site. Press the lancing device up and down in a slow pumping motion to assist the flow of blood.

6. Trigger the lancing device while keeping steady pressure on the site. Apply pressure to the site with the lancing device to assist the flow of blood.



7. Touch the blood drop to the **front edge** of the yellow window of the test strip. When you see ⌛ flash, you have enough blood in the test strip.

8. The result appears on the display. Mark the result, or remove and discard the used test strip.

Note: If the blood drop is too small, reapply pressure to get a sufficient blood drop.

Unusual Blood Glucose Results

If your blood glucose result does not match how you feel, follow these steps:

Troubleshooting Checks	Action
1. Check if the test strips are expired.	Discard the test strips if they are past the expiry date.
2. Check if the cap on the test strip container was always closed tightly.	Replace the test strips if you think they were uncapped for some time.
3. Check if the test strip was out of the container for a long time.	Repeat the test with a new test strip.
4. Check if the test strips were stored in a cool, dry place.	Repeat the test with a properly stored test strip.

Troubleshooting Checks	Action
5. Check if you followed the testing steps.	Read Chapter 2, “Testing Your Blood Glucose” and test again. If you still have problems, call Accu-Chek Customer Care at 1-800-363-7949.
6. Check if the code number on the meter display matches the code number on the test strip container.	If they do not match, insert the correct code chip into the meter and test again.
7. If you are still unsure of the problem…	Repeat the test with a new test strip and perform a control test. If you still have problems, call Accu-Chek Customer Care at 1-800-363-7949.

Symptoms of High or Low Blood Glucose

Being aware of the symptoms of high or low blood glucose can help you understand your test results and decide what to do if they seem unusual. Here are the most common symptoms:

High blood glucose (hyperglycemia): fatigue, increased appetite or thirst, frequent urination, blurred vision, headache, or general aching.

Low blood glucose (hypoglycemia): sweating, trembling, blurred vision, rapid heartbeat, tingling, or numbness around mouth or fingertips.

If you are experiencing any of these symptoms, test your blood glucose. If your blood glucose result is displayed as LO or HI, contact your healthcare professional immediately.

Chapter 3: Meter Memory, Setup, and Downloading

Memory

Storing Test Results

The meter automatically stores up to 500 blood glucose test results with the time and date of the test and any test markers. You can review them at any time. Test results are stored from the newest to the oldest. It is very important to set the correct time and date in the meter. Having the correct time and date setting helps ensure appropriate interpretation of blood glucose results by you and your healthcare professional.

Notes:

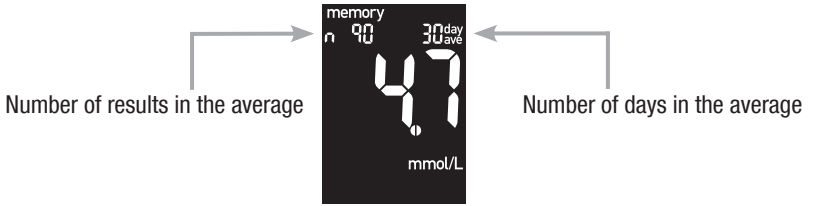
- **Do not change your therapy based on one individual result in memory.**
- The memory is not lost when you replace the batteries. You do need to check that the time and date are correct after you replace the batteries.
- Once 500 results are in memory, adding a new result causes the oldest one to be deleted.
- If more than 500 tests are performed within a 90 day period, only the most recent 500 results are included in the 90 day average.
- Hold ◀ or ▶ down to scroll through the results faster.

- The control results are stored in memory, but cannot be reviewed on the meter. They are not included in the 7, 14, 30, and 90 day averages. To view stored control results, first download them to a compatible software application. For product availability, please contact Accu-Chek Customer Care at 1-800-363-7949.

Viewing Test Results

With the meter on or off, press and release ◁ or ▷ to enter memory. The most recent result appears.

- **To view previous results in order** – press ◁
- **To look at the 7, 14, 30, or 90 day averages** – press ▷
- **To view pre-meal and post-meal 7, 14, 30, and 90 day averages** – continue to press ▷



Note:

Only test results that have been assigned a pre-meal ( ) or post-meal ( ) marker are included in pre-meal and post-meal averages. All blood glucose results are included in the general 7, 14, 30, and 90 day averages.

Past Results

Press ◁ to view past results from newest to oldest.

General Average

Press ▷ to view 7, 14, 30, and 90 day averages.

Pre-Meal Average

Continue to press ▷ to view 7, 14, 30, and 90 day pre-meal averages.

Post-Meal Average

Continue to press ▷ to view 7, 14, 30, and 90 day post-meal averages.

Meter Setup

Using the Set-Up Mode

By using the set-up mode, you can personalize the meter to suit your lifestyle. Here are the features you can customize in the order in which they appear in the set-up mode:

Time and date – set the time and date

Beeper – select "On" or "OFF"

Post-meal reminder time – select 1 hour or 2 hours

Alarm clock – select "On" or "OFF"

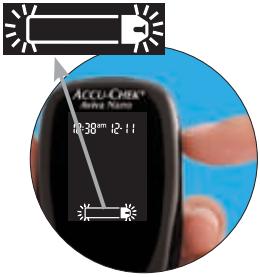
Hypo indicator – select "On" or "OFF." If you select "On," choose the blood glucose level for the alert.

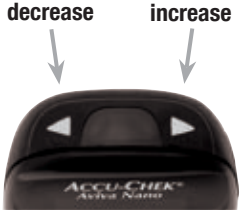
Using the set-up mode is easy.

Here is a general overview of the function each button performs in the set-up mode.

- **To enter the set-up mode** – with the meter on, press and **hold** ◐ until "set-up" appears.
- **To confirm the feature you have chosen** – press and release ◐.
- **To exit the set-up mode** – press and **hold** ◐ until you see the flashing test strip symbol.
- **To adjust settings** – press and release ◁ or ▷. To scroll faster press and **hold** ◁ or ▷.

Setting the Time and Date

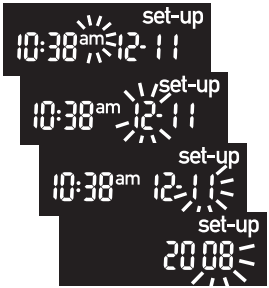




1. Press and release ⏻ to turn the meter on. The flashing test strip symbol appears.
2. Press and **hold** ⏻ until “set-up” appears on the display. The hour flashes.
3. Press and release ◁ or ▷ to decrease or increase the hour.

4. Press and release ⓘ to confirm the hour. The minutes flash.

5. Press and release ◁ or ▷ to adjust the minutes. Press and release ⓘ to confirm the minutes.



6. Repeat step 5 to set am/pm, month, day and year.

7. If you want to set up more options, press and release ◐. If you want to exit, press and **hold** ◐ until you see the flashing test strip symbol.

Setting the Beeper On/Off

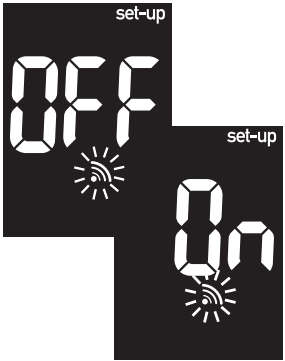
Your new meter has the beeper preset to "On." You can set the beeper to "OFF," if you prefer. This will not affect your test results.

The beeper is helpful because it prompts you:

- To apply blood or control solution to the test strip
- When enough blood or control solution is drawn into the test strip
- When the test is complete
- When a button is pressed
- When it is time to test (if you set the alarm clock or post-meal reminder)
- If an error occurred while testing (even if the beeper is set to off, it still beeps for an error)

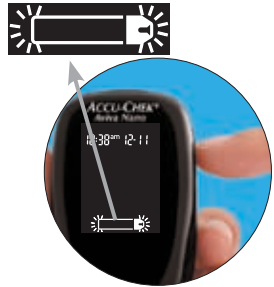
1. Press and release ⏻ to turn the meter on. The flashing test strip symbol appears.

2. Press and **hold** ⏻ until “set-up” appears on the display.



3. Press and release ⏻ repeatedly until you reach the display with the flashing beeper symbol and “On” or “OFF.”

4. Press and release ◀ or ▶ to switch between “On” and “OFF.”



5. If you want to set up more options, press and release ⓘ. If you want to exit, press and **hold** ⓘ until you see the flashing test strip symbol.

Setting the Post-Meal Reminder Time ( )

The post-meal reminder:

- Beeps one or two hours after the test to remind you to do a post-meal test.
- Beeps every two minutes up to three times.
- Turns off by inserting a test strip or pressing any button.

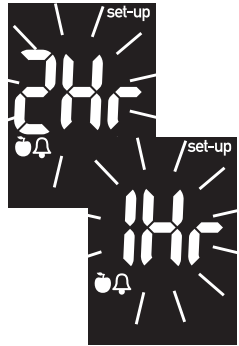
The post-meal reminder time is preset on your meter to two hours, however, you can choose one or two hours in the set-up mode.

Notes:

- The beeper must be set to “On” for the reminder to occur.
- If you tested within 15 minutes of a reminder, the reminder does not occur.
- If the meter is on at the reminder time, the reminder does not occur.
- Exposure to cold conditions may disable reminders until the meter is turned on.

1. Press and release ⏻ to turn the meter on. The flashing test strip symbol appears.

2. Press and **hold** ⏻ until “set-up” appears on the display.



3. Press and release ⏻ repeatedly until you reach the display with “set-up,” and the flashing “1Hr” or “2Hr.”

4. Press and release ◁ or ▷ to select “1Hr” or “2Hr.” Press and release ⓘ to confirm your choice.

When a post-meal reminder is activated this screen appears.

Setting the Alarm Clock Function (🔔)

The alarm clock:

- Beeps to remind you to perform a test.
- Beeps every two minutes up to three times.
- Turns off by inserting a test strip or pressing any button.
- Is preset to "OFF." You must turn it on to use this feature.

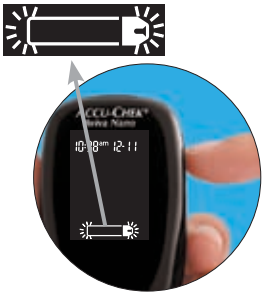
You can set up to 4 alarms per day. If you turn A-1, A-2, A-3, and A-4 on, your meter is preset with the following times for your convenience. You can adjust the times to suit your needs.

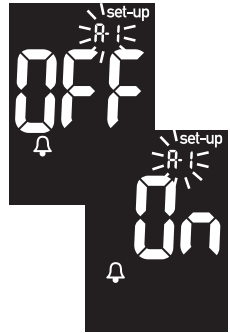
A-1 8:00 am **A-2** 12:00 pm (noon) **A-3** 6:00 pm **A-4** 10:00 pm

Notes:

- If you tested within 15 minutes of an alarm, the alarm does not occur.
- If the meter is on at the alarm time, the alarm does not occur.
- Exposure to cold conditions may disable alarms until the meter is turned on.

When you are setting the time for the alarm clock function, the bell symbol and “set-up” remain on the display.





1. Press and release ⏻ to turn the meter on. The flashing test strip symbol appears.
2. Press and **hold** ⏻ until “set-up” appears on the display.
3. Press and release ⏻ repeatedly until you reach the display with the bell symbol, “OFF,” “set-up,” and the flashing “A-1.”

4. Press and release ◁ or ▷ to switch between “On” and “OFF.” Press and release ◐ to confirm your choice.

5. If you select “On,” the hour flashes. “A-1” and the bell symbol remain on the display.

6. Press and release ◁ or ▷ to select the hour. Press and release ◐ to confirm the hour.

7. The minutes flash. Press and release ◁ or ▷ to select 00, 15, 30, or 45. These are the only choices.

8. Press and release ◐ to confirm the minutes. “Am” or “pm” flashes on the display. Press and release ◁ or ▷ to switch between “am” and “pm.” Press and release ◐ to confirm “am” or “pm.”

9. “Set-up,” "OFF,” and the bell symbol appear on the display with the next alarm (“A-2”) flashing. You can either set a second alarm or press and **hold** ◐ until you see the flashing test strip symbol to exit the set-up mode.

Setting the Hypo Indicator (!) Function

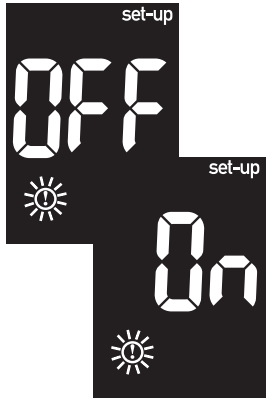
The hypo indicator:

- Can be set to a level between 2.8 to 5.0 mmol/L to let you know when your blood glucose is possibly too low.

Notes:

- Before you set the hypo indicator, talk to your healthcare professional to help you decide what blood glucose level is your hypoglycemic level.
- The hypo indicator is preset to “OFF" in your new meter.

1. Press and release ◐ to turn the meter on. The flashing test strip symbol appears.



2. Press and **hold** ⓘ until "set-up" appears on the display.

3. Press and release ⓘ repeatedly until you reach the display with "set-up" and "OFF," and the flashing ⓘ.

4. Press and release ◁ or ▷ to switch between "On" and "OFF." Press and release ⓘ to confirm your choice.

5. If you choose to set the hypo indicator to “On,” “set-up” appears and ⓘ flashes. The display shows 3.9 mmol/L.

6. Press and release ◁ or ▷ to select the level you want. Press and release ◐ to confirm it.

7. Press and **hold** ◐ until you see the flashing test strip symbol to exit the set-up mode.

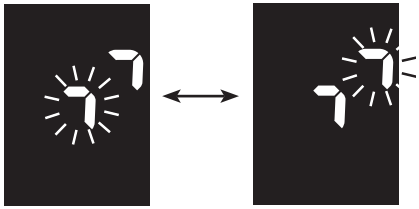
This function is no substitute for hypoglycemia training by your healthcare professional.

Transferring Data Directly to a Computer or PDA Using Specialized Software and an Infrared Cable

You can transfer your stored results to a computer to track, identify patterns, and print.

1. Install the software according to the instructions. To transfer the results to a computer, connect the infrared cable according to the instructions.
2. Run the software program and follow the instructions about how to download information. Make sure the software is ready to accept data from the meter.
3. With the meter off, press and **hold** both ◁ and ▷ until two arrows on the display alternately flash.
4. Locate the infrared (IR) window on the top of the meter.
5. Locate the IR window on either the infrared cable (computer) or PDA.

6. Put the meter on a flat surface. Point the two IR windows toward each other. They should be 3 to 10 cm apart.
7. Do not move the infrared cable (computer), PDA, or meter during the transfer.
8. Follow the prompts on the software.
9. The software program may shut off the meter automatically when the data transfer is complete.



Notes:

- If the data did not transfer successfully, try again. If you still have problems, contact Accu-Chek Customer Care at 1-800-363-7949.
- To make the most of the download feature, you must set the time and date in the meter correctly.

Chapter 4: Control Testing

Why Perform Control Tests

Performing a control test lets you know that the meter and test strips are working properly to give reliable results. You should perform a control test when:

- You open a new box of test strips
- You left the test strip container open
- You want to check the meter and test strips
- Your test strips were stored in extreme temperature and/or humidity
- You dropped the meter
- Your test result does not agree with how you feel
- You want to check if you are testing correctly

About the Control Solutions

- Only use Accu-Chek Aviva Control Solutions.
- The meter automatically recognizes the Accu-Chek Aviva Control Solution.
- The control results are not displayed in memory.
- Write the date you opened the control solution bottle on the bottle label. The solution is good for three months from that date or until the expiry date on the bottle label, whichever comes first.
- Do not use control solution that is past the expiry date.
- The solution can stain clothing. If you spill it, wash your clothes with soap and water.
- Close the bottle tightly after use.
- Store the bottle at 2 °C to 32 °C. Do not freeze.

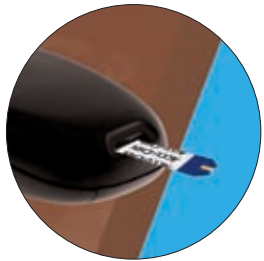
Performing a Control Test

You need the meter, a test strip, and control solution Level 1 and/or Level 2. The control level is printed on the bottle label.

1. Insert the test strip into the meter in the direction of the arrows. The meter turns on.

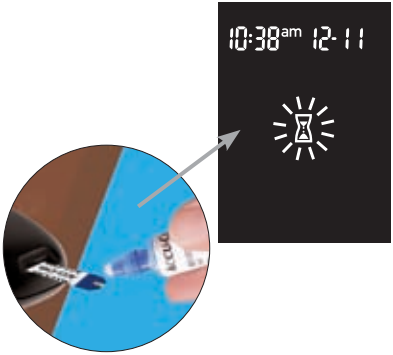
2. Make sure the code number on the display matches the code number on the test strip container. If you miss seeing the code number, remove the test strip and reinsert it into the meter.

3. Select the control solution you want to test. You will enter the level later in the test.



4. Put the meter on a flat surface, like a table.

5. Remove the control bottle cap. Wipe the tip of the bottle with a tissue.



6. Squeeze the bottle until a tiny drop forms at the tip. Touch the drop to the **front edge** of the yellow window of the test strip. When you see ⌛ flash, you have enough control solution in the test strip. Wipe the tip of the bottle with a tissue then cap the bottle tightly.

7. The result appears on the display, along with the control bottle symbol and flashing “L.” Do not remove the test strip yet. Press ▷ once to mark the result as a Level 1. If you tested the Level 2 control, press ▷ a second time.

8. Press and release ⏻ to confirm the control level in the meter.
9. “OK” and the control result alternate on the display if the result is in range. The range is printed on the test strip container label. When the control result is inside the range on the test strip container, the test strips and meter are working properly. “Err” and the control result alternate on the display if the result is not in range. Remove and discard the used test strip.

Understanding Out-of-Range Control Test Results

If the control result is not inside the acceptable range, here are some things you can do to solve the problem:

Troubleshooting Checks	Action
1. Check if the test strips or control solutions are expired.	Discard the test strips or control solutions if either is past the expiry date. If the control solution was opened more than three months ago, discard it.
2. Check if you wiped the tip of the control solution bottle before and after use.	Wipe the tip of the bottle with a tissue. Repeat the control test with a new test strip and a fresh drop of control solution.
3. Check if the caps on the test strip container and the control solution bottle were always closed tightly.	Replace the test strips or control solutions if you think either may have been uncapped for some time.
4. Check if the test strip was out of the container for a long time.	Repeat the control test with a new test strip.

Troubleshooting Checks	Action
5. Check if the test strips and control solutions were stored in a cool, dry place.	Repeat the control test with a properly stored test strip or control solution.
6. Check if you followed the testing steps.	Read Chapter 4, “Control Testing” and test again. If you still have problems, call Accu-Chek Customer Care at 1-800-363-7949.
7. Check if you chose the correct control solution level, either 1 or 2, when you performed the test.	If you chose the wrong control solution level, you can still compare the control result to the range printed on the test strip container.
8. Check if the code number on the meter display matches the code number on the test strip container.	If they do not match, insert the correct code chip into the meter and test again.
9. If you are still unsure of the problem…	Repeat the control test with a new test strip. If you still have problems, call Accu-Chek Customer Care at 1-800-363-7949.

Chapter 5: Maintenance and Troubleshooting

Changing the Batteries

1. Use your thumb to slide the battery drawer out of the meter.
2. Remove the old batteries and place the new ones in the drawer with the **(+) side facing down.**
3. Slide the battery drawer back into position until it locks into place.

Note: When you install new batteries, the meter automatically prompts you to check the time and date when you turn it on.

Notes:

- The meter uses two 3-volt lithium batteries, type 2032. This type of battery can be found in many stores. It is a good idea to have spare batteries available.
- Be sure the batteries are inserted **(+) side facing down** or facing away from you.
- After you change the batteries, the meter prompts you to confirm the meter's time and date settings. All test results are saved in memory.
- Always replace both batteries at the same time and with the same brand.

Cleaning the Meter

Caring for the Accu-Chek Aviva Nano Meter is easy. Just keep it free of dust. If you need to clean it, follow these guidelines carefully to help you get the best performance possible:

Do

- Make sure the meter is off
- Gently wipe the meter's surface with a soft cloth slightly dampened (wring out any excess liquid) with one of these cleaning solutions:
  - 70 % isopropyl alcohol
  - Mild dishwashing liquid mixed with water
  - 10 % household bleach solution (1 part bleach plus 9 parts water) made the same day

Do Not

- Get any moisture in the code chip slot or test strip slot
- Spray any cleaning solution directly onto the meter
- Put the meter under water or liquid
- Pour liquid into the meter

Maintenance and Troubleshooting

The meter needs little or no maintenance with normal use. It automatically tests its own systems every time you turn it on and lets you know if something is wrong.

If you drop the meter or think it is not giving accurate results, call Accu-Chek Customer Care at 1-800-363-7949.

To make sure the display is working properly, turn the meter off, then press and **hold** ◐ to see the complete display. All the segments should be clear and look exactly like the picture below. If not, call Accu-Chek Customer Care at 1-800-363-7949.

Screen Messages and Troubleshooting

Never make treatment decisions based on an error message. If you have any concerns, call Accu-Chek Customer Care at 1-800-363-7949.

The meter will not turn on or the display is blank.

- Batteries are dead –
  Insert new batteries
- Display is damaged –
  Call Accu-Chek Customer Care at 1-800-363-7949
- Meter is defective –
  Call Accu-Chek Customer Care at 1-800-363-7949
- Extreme temperatures –
  Move the meter to a more temperate area

Battery power is low. Change the batteries soon.

The meter is ready for you to insert a test strip.

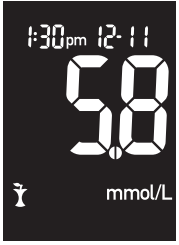
The meter is in set-up mode, waiting for you to change or confirm settings.

The meter is ready for a drop of blood or control solution.

Blood glucose may be higher than the measuring range of the system.

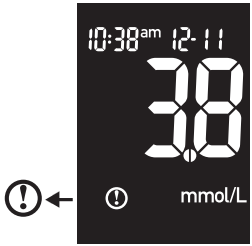
A pre-meal marker was assigned to this test result.

Blood glucose may be lower than the measuring range of the system.

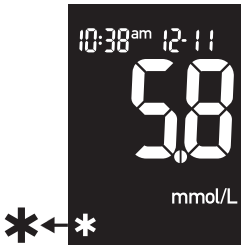


A post-meal marker was assigned to this test result.

A pre-meal marker was assigned to this test result and the post-meal reminder has been activated.



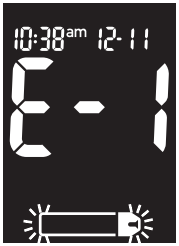
Blood glucose is below the defined hypoglycemia (low blood glucose) level.



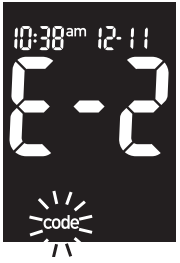
A general marker was assigned to this test result.

The meter is not coded or the code chip is not inserted. Turn off the meter and recode it.

The test strips will expire at the end of the current month. Before the end of the month, insert a new code chip from a new box of test strips and ensure the code chip number matches the code number on the test strip container. Make sure the time and date in the meter are correct.



Your blood glucose may be extremely low, or the test strip may be damaged or not properly inserted. If you see this error message **after** you applied blood to the test strip, see Chapter 2, "Unusual Blood Glucose Results." If you see this error message **before** you applied blood to the test strip, remove the test strip and reinsert it, or replace it if damaged. Verify that the code number printed on the test strip container matches the code number printed on the code chip currently inserted in the meter. If the message reappears, call Accu-Chek Customer Care at 1-800-363-7949.



The code chip is incorrect. Turn off the meter and insert a new code chip. If this does not fix the problem, call Accu-Chek Customer Care at 1-800-363-7949.

Your blood glucose may be extremely high or a meter or a test strip error has occurred. If this confirms how you feel, **contact your healthcare professional immediately.** If it does not confirm how you feel, repeat the test and refer to Chapter 2, “Unusual Blood Glucose Results.” If this does not confirm the way you feel, run a control test with your control solution and a new test strip. If the control result is within the acceptable range, review the proper testing procedure and repeat your blood glucose test with a new test strip. If the E3 code still appears for your blood glucose test, your blood glucose result may be extremely high and above the system’s reading range. **Contact your healthcare professional immediately.** If the control result is not within the acceptable range, see Chapter 4, “Understanding Out-of-Range Control Test Results.”

Not enough blood or control solution was drawn into the test strip for measurement or was applied after the test had started. Discard the test strip and repeat the test.

Blood or control solution was applied to the test strip before the flashing drop symbol appeared on the display. Discard the test strip and repeat the test.

The code chip is from an expired lot of test strips. Ensure the code chip number matches the code number on the test strip container. Remove the code chip and enter the set-up mode to ensure the time and date in the meter are correct.

An electronic error occurred or, in rare cases, a used test strip was removed and reinserted. Turn the meter off and on, or take the batteries out for 20 seconds and reinsert them. Perform a blood glucose or control test. If the problem persists, call Accu-Chek Customer Care at 1-800-363-7949.

The temperature is above or below the proper range for the system. Move to an area within the temperature range indicated for test strip use in the test strip package insert, wait five minutes, and repeat the test. Do not artificially heat or cool the meter.

The batteries are almost out of power. Change the batteries now.

The time and date settings may be incorrect. Make sure the time and date are correct and adjust, if necessary.

Note:

If you see any other error screen, please call Accu-Chek Customer Care at 1-800-363-7949.

Chapter 6: Technical Information

Product Limitations

Please read the literature packaged with your test strips to find the latest information on product specifications and limitations.

Specifications

Blood volume	0.6 µL
Sample type	Fresh whole blood
Measuring time	Refer to your test strip package insert for more information
Measuring range	0.6 to 33.3 mmol/L
Test strip storage conditions	Refer to your test strip package insert for more information
Meter storage conditions	Temperature: -25 °C to 70 ºC
System operating conditions	Refer to your test strip package insert for more information
Relative humidity operating range	Refer to your test strip package insert for more information
Memory capacity	500 results with time and date
Automatic power off	2 minutes
Power supply	Two 3-volt lithium batteries (type 2032)
Display	LCD

Dimensions	69 x 43 x 20 mm (LWH)
Weight	Approx. 40 g (with batteries)
Construction	Hand-held
Protection class	III
Meter type	The Accu-Chek Aviva Nano Meter is suitable for continuous operation
Control solution storage conditions	2 °C to 32 °C

Electromagnetic Compatibility

This meter meets the electromagnetic immunity requirements as per ISO 15197 Annex A. The chosen basis for electrostatic discharge immunity testing was basic standard IEC 61000-4-2. In addition, it meets the electromagnetic emissions requirements as per EN 61326. Its electromagnetic emission is thus low. Interference from other electrically driven equipment is not to be anticipated.

Performance Analysis

The performance data for the Accu-Chek Aviva Nano System (Accu-Chek Aviva Nano Meter with Accu-Chek Aviva Test Strips) were obtained using capillary blood from diabetic patients (method comparison, accuracy), venous blood (repeatability), and control solution (reproducibility). The system is calibrated with venous blood containing various levels of glucose. The reference values are obtained using the hexokinase method. For method comparison, the results were compared with results obtained using the hexokinase method with deproteinization (automatic analyzer). The hexokinase method is traceable to an NIST standard.

Measuring Principle

Blood glucose concentrations may be measured in whole blood or plasma. Although whole blood is always applied to the test strip, the meter displays blood glucose results that relate to plasma. Please refer to the package insert for information on how the system works, on the test principle, and on reference methods

Product Safety Information

Strong electromagnetic fields may interfere with the proper operation of the meter. Do not use this meter close to sources of strong electromagnetic radiation.

To avoid electrostatic discharge, do not use the meter in a very dry environment, especially one in which synthetic materials are present.

Disposing of Your Used Meter

During blood glucose measurement the meter itself may come into contact with blood. Used meters therefore carry a risk of infection. Please dispose of your used meter, after removing the batteries, according to the regulations applicable in your country. For information about correct disposal please contact your local council and authority.

The meter falls outside the scope of the European Directive 2002/96/EC—Directive on waste electrical and electronic equipment (WEEE).

Explanation of Symbols

You may encounter the following symbols on packaging, on the type plate, and in the User's Manual for your Accu-Chek Aviva Nano Meter, shown here with their meaning.

	Consult the instructions for use
	Caution (refer to accompanying documents). Please refer to safety-related notes in the manual accompanying this instrument.
	Store at
	Manufacturer
REF	Catalogue number
IVD	For in vitro diagnostic use.
CE 0088	This product fulfills the requirements of Directive 98/79/EC on in vitro diagnostic medical devices.
	3V type 2032

Guarantee

The statutory provisions on rights in consumer goods sales in the country of purchase shall apply.

Additional Supplies

The following supplies and accessories are available from your authorized Roche Diabetes Healthcare Center, pharmacies or your medical/surgical supply dealer:

Test Strips

Accu-Chek Aviva Test Strips

Control Solutions

Accu-Chek Aviva Control Solutions

Information for Healthcare Professionals

WARNING: Patients receiving peritoneal dialysis using solutions containing icodextrin (e.g. Extraneal, Icodial) should not use the Accu-Chek Aviva Test Strip. It could cause an overestimation of blood glucose results.

Healthcare Professionals: Follow the infection control procedures appropriate for your facility.

A drop of fresh whole blood is required to perform a blood glucose test. Fresh venous, capillary or arterial blood may be used. Caution should be taken to clear arterial lines before blood is drawn. Refer to your test strip package insert for additional healthcare professional information.

Decisions about whether to recommend alternate site testing (AST) should take into account the motivation and knowledge level of the patient and his or her ability to understand the considerations relative to diabetes and AST. If you are considering recommending AST for your patients, you need to understand that there is a potential for a significant difference between fingertip/palm and alternate site blood glucose

test results. The difference in capillary bed concentration and blood perfusion throughout the body can lead to sample site-to-site differences in blood glucose results. These physiological effects vary between individuals and can vary within a single individual based upon his or her behavior and relative physical condition.

Our studies involving alternate site testing of adults with diabetes show that most persons will find their glucose level changes more quickly in the fingers'/palms' blood than the alternate sites' blood.* This is especially important when glucose levels are falling or rising rapidly. If your patient is used to making treatment decisions based upon fingertip/palm readings, he or she should consider the delay, or lag-time, affecting the results obtained from an alternate site.

* Data on file.

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The ACCU-CHEK® Aviva Nano system, including the meter, code chip, and test strips, is covered by the following patents: Canadian Patent Nos. 2,068,214; 2,153,877; 2,153,883; 2,153,884; 2,175,501.

Le système ACCU-CHEK® Aviva Nano, comprenant le glycomètre, la puce d'étalonnage et les bandelettes-test, est protégé par les brevets suivants : No de brevets canadiens 2,068,214; 2,153,877; 2,153,883; 2,153,884; 2,175,501.

ACCU-CHEK® Aviva Nano

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